Available online at www.sciencedirect.com
SCIENCE DIRECT®
ELSEVIER
Nuclear Instruments and Methods in Physics Research B 207 (2003) 504–510
NIM B
Beam Interactions with Materials & Atoms
www.elsevier.com/locate/nimb

Author index

Abbey, A.F., see Ambrosi, R.M. . . . 207 (2003) 175
Acosta, E., see Sempau, J. . . . 207 (2003) 107
Ahmad, B., see Akhtar, M.N. . . . 207 (2003) 333
Ahmad, S., see Akhtar, M.N. . . . 207 (2003) 333
Aizawa, T., see Akhajdenung, T. . . . 207 (2003) 45
Akhajdenung, T., T. Aizawa, M. Yoshitake and A. Mitsuo, Feasibility study of self-lubrication by chlorine implantation . . . 207 (2003) 45
Akhtar, M.N., B. Ahmad and S. Ahmad, Low energy heavy ion detection with the plastic scintillator NE102E 207 (2003) 333
Alfaro, R., see Menchaca-Rocha, A. . . . 207 (2003) 356
Allard, L.F., see Alves, E. . . . 207 (2003) 55
Almeida, S.M., M.A. Reis, M.C. Freitas and C.A. Pio, Quality assurance in elemental analysis of airborne particles . . . 207 (2003) 434
Alonso, U., T. Missana, A. Patelli, J. Ravagnan and V. Rigato, RBS and μPIXE analysis of uranium diffusion from bentonite to the rock matrix in a deep geological waste repository . . . 207 (2003) 195
Alves, E., C. Marques, R.C. da Silva, T. Monteiro, J. Soares, C. McHargue, L.C. Ononye and L.F. Allard, Structural and optical studies of Co and Ti implanted sapphire . . . 207 (2003) 55
Ambrosi, R.M., D.R. Smith, A.F. Abbey, I.B. Hutchinson, E. Kendziorra, A. Short, A. Holland, M.J.L. Turner and A. Wells, The impact of low energy proton damage on the operational characteristics of EPIC-MOS CCDs . . . 207 (2003) 175
Amédée, J., see Yang, Y. . . . 207 (2003) 165
An, Z., M.T. Liu, Y.C. Fu, Z.M. Luo, C.H. Tang, C.M. Li, B.H. Zhang and Y.J. Tang, Some recent progress on the measurement of K-shell ionization cross-sections of atoms by electron impact: Application to Ti and Cr elements . . . 207 (2003) 268
Andrukhovich, S.K., A.V. Berestov, N. Antovich, P. Vukotich, A.A. Gurinovich, A.A. Khrutchinsky and O.N. Metelitsa, Investigation of orthopositronium 3γ-decay using a multidetector spectrometer . . . 207 (2003) 219
Angelov, V., see Rusanov, V. . . . 207 (2003) 205
Antovich, N., see Andrukhovich, S.K. . . . 207 (2003) 219
Arano, I., see Kudo, H. . . . 207 (2003) 283
Arista, N.R., Erratum to "Energy loss of ions in solids: Non-linear calculations for slow and swift ions" [Nucl. Instr. and Meth. B 195 (2002) 91–105] . . . 207 (2003) 232

Baquey, C., see Yang, Y. . . . 207 (2003) 165
Becker, H.-W., see Schweitzer, J.S. . . . 207 (2003) 80
Belmont-Moreno, E., see Menchaca-Rocha, A. . . . 207 (2003) 356
Berar, J.-F., see Hennet, L. . . . 207 (2003) 447
Berestov, A.V., see Andrukhovich, S.K. . . . 207 (2003) 219
Bhuloka Reddy, S., M. John Charles, G.J. Naga Raju, V. Vijayan, B. Seetharami Reddy, M. Ravi Kumar and B. Sundareswar, Trace elemental analysis of carcinoma kidney and stomach by PIXE method . . . 207 (2003) 345
Blaauw, M., see Degenaar, H. . . . 207 (2003) 131
Bluhme, H., see Uggerhøj, U.I. . . . 207 (2003) 402
Boatner, L.A., see Meldrum, A. . . . 207 (2003) 28
Boatner, L.A., see Meldrum, A. . . . 207 (2003) 36
Boatner, L.A., see Jiang, W. . . . 207 (2003) 85
Bodart, F., see Cabioc'h, T. . . . 207 (2003) 409
Bogaerts, A., see Chen, Z.Y. . . . 207 (2003) 415
Bortolot, V.J., see Erfurt, G. . . . 207 (2003) 487
Bryja, L., see Misiuk, A. . . . 207 (2003) 233

doi:10.1016/S0168-583X(03)01563-5

Cabioc'h, T., E. Thune, M. Jaouen and F. Bodart, Resonant nuclear reaction analysis study of carbon phase formation during carbon ion-implantation into silver substrates 207 (2003) 409
Cabrera, J.I., see Menchaca-Rocha, A. 207 (2003) 356
Campbell, E.E.B., see Popok, V.N. 207 (2003) 145
Carli, C., see Müllers, B. 207 (2003) 462
Caturla, M., see Felter, T.E. 207 (2003) 72
Cechak, T., see Guillerminet, C. 207 (2003) 124
Chambers, S.A., see Wang, C.M. 207 (2003) 1
Chany, P., see Raoux, A.-C. 207 (2003) 186
Chaumont, J., see Vincent, L. 207 (2003) 339
Chen, Z.Y., A. Bogaerts, D. Depla and V. Ignatova, Dynamic Monte Carlo simulation for reactive sputtering of aluminium 207 (2003) 415
Cheng, X.Q., R.S. Wang, X.J. Tang and B.X. Liu, Formation of $MoSi_2$ and associated fractal growth on Si surface upon high current pulsed Mo-ion implantation 207 (2003) 301

Danhara, T., see Yoshioka, T. 207 (2003) 323
da Silva, R.C., see Alves, E. 207 (2003) 55
Date, H., Y. Ishimaru and M. Shimozuma, Electron collision processes in gaseous xenon 207 (2003) 373
Davila, L., see Felter, T.E. 207 (2003) 72
Degenaar, H. and M. Blaauw, The neutron energy distribution to use in Monte Carlo modeling of neutron capture in thermal neutron beams 207 (2003) 131
Denis, C., see Raoux, A.-C. 207 (2003) 186
Depla, D., see Chen, Z.Y. 207 (2003) 415
Dev, B.N., see Kamila, J. 207 (2003) 291
Dhanasekaran, R., see Senthil Kumar, M. 207 (2003) 308
Diaz-Herrera, B., see Mayer, M. 207 (2003) 263
Ditrói, F., see Tárkányi, F. 207 (2003) 381
Dogra, A., M. Singh and R. Kumar, 50 MeV Li^{3+} ion irradiation induced modifications in dielectric properties of Al^{3+} substituted Mg–Mn ferrite 207 (2003) 296
Dörschel, B., D. Hermsdorf, S. Pieck, S. Starke, H. Thiele and F. Weickert, Studies of SSNTDs made from LR-115 in view of their applicability in radiobiological experiments with alpha particles 207 (2003) 154

El Haj, A.J., see Yang, Y. 207 (2003) 165
Erfurt, G., M.R. Krbetschek, V.J. Bortolot and F. Preusser, A fully automated multi-spectral radioluminescence reading system for geochronometry and dosimetry 207 (2003) 487
Ewing, R.C., see Meldrum, A. 207 (2003) 28

Felter, T.E., L. Hrubesh, A. Kubota, L. Davila and M. Caturla, Laser damage probability studies of fused silica modified by MeV ion implantation 207 (2003) 72
Fernández-Varea, J.M., see Sempau, J. 207 (2003) 107
Finstad, T.G., see Marstein, E.S. 207 (2003) 424
Freitas, M.C., see Almeida, S.M. 207 (2003) 434
Fu, Y.C., see An, Z. 207 (2003) 268
Fynbo, H.O.U., Doppler broadened γ-lines from exotic nuclei 207 (2003) 275

Gao, F., see Wang, C.M. 207 (2003) 1
Gao, F. and W.J. Weber, Atomic simulation of ion–solid interaction in ceramics 207 (2003) 10
Gao, F., C.M. Wang, S. Maheswaran and S. Thevuthasan, Atomic-level simulations of misfit dislocation at the interface of Fe_2O_3/Al_2O_3 system 207 (2003) 63
Gautrot, S., see Vincent, L. 207 (2003) 339
Gerward, L., see Singh, H. 207 (2003) 257
Glazov, L.G. and P. Sigmund, Nuclear stopping in transmission experiments 207 (2003) 240
Goswami, D.K., see Kamila, J. 207 (2003) 291
Graeff, W., see Misiuk, A. 207 (2003) 233
Gschwind, R., see Guillerminet, C. 207 (2003) 124
Guillerminet, C., R. Gschwind, L. Makovicka, J. Novotny Jr., V. Spevacek and T. Cechak, Determination of 3D dose distribution by PAG and Monte-Carlo simulations 207 (2003) 124

Gunns, A.E., see Marstein, E.S. 207 (2003) 424
Gurinovich, A.A., see Andrukhovich, S.K. 207 (2003) 219

Heinrich, R. and A. Wucher, Projectile size effects on cluster formation in sputtering 207 (2003) 136
Hennet, L., D. Thiaudière, C. Landron, J.-F. Berar, M.-L. Saboungi, G. Matzen and D.L. Price, Anomalous x-ray scattering on molten levitated samples 207 (2003) 447
Hermanne, A., see Tárkányi, F. 207 (2003) 381
Hermsdorf, D., see Dörschel, B. 207 (2003) 154
Holland, A., see Ambrosi, R.M. 207 (2003) 175
Houdayer, S., see Vincent, L. 207 (2003) 339
Hrubesh, L., see Felter, T.E. 207 (2003) 72
Huang, N.K., D.Z. Wang, Q. Xiong and B. Yang, XPS study of hydrogen permeation effect on SiC–C films . 207 (2003) 395
Hutchinson, I.B., see Ambrosi, R.M. 207 (2003) 175

Ignatova, V., see Chen, Z.Y. 207 (2003) 415
Ishimaru, Y., see Date, H. 207 (2003) 373
Iwano, H., see Yoshioka, T. 207 (2003) 323
Iwazaki, W., see Kudo, H. 207 (2003) 283

Jaouen, M., see Cabioc'h, T. 207 (2003) 409
Jiang, W., W.J. Weber, S. Thevuthasan and L.A. Boatner, Effect of ion irradiation in cadmium niobate pyrochlores 207 (2003) 85
Jiang, W., W.J. Weber, Y. Zhang, S. Thevuthasan and V. Shutthanandan, Ion beam analysis of irradiation effects in 6H–SiC 207 (2003) 92
Jiang, W., V. Shutthanandan, S. Thevuthasan, D.E. McCready and W.J. Weber, Oxygen analysis using energetic ion beams 207 (2003) 453
John Charles, M., see Bhuloka Reddy, S. 207 (2003) 345
Jørgensen, S., see Marstein, E.S. 207 (2003) 424

Kaïtasov, O., see Vincent, L. 207 (2003) 339
Kamila, J., B. Satpati, D.K. Goswami, M. Rundhe, B.N. Dev and P.V. Satyam, Low current MeV Au^{2+} ion-induced amorphization in silicon: Rutherford backscattering spectrometry and transmission electron microscopy study 207 (2003) 291
Kanjilal, D., see Senthil Kumar, M. 207 (2003) 308
Kendziorra, E., see Ambrosi, R.M. 207 (2003) 175
Khrutchinsky, A.A., see Andrukhovich, S.K. 207 (2003) 219
Knudsen, H., see Uggerhøj, U.I. 207 (2003) 402
Koguchi, Y., see Yoshioka, T. 207 (2003) 323
Koop, N., see Rusanov, V. 207 (2003) 205
Kovalev, G.V., Focusing limits of channeled high energy particles in bent crystals 207 (2003) 482
Krbetschek, M.R., see Erfurt, G. 207 (2003) 487
Kubota, A., see Felter, T.E. 207 (2003) 72
Kubsky, S., see Schweitzer, J.S. 207 (2003) 80
Kudo, H., K.-i. Takeda, T. Suguri, W. Iwazaki, C. Sakurai, I. Arano, S. Numazawa and S. Seki, Electron loss from fast partially stripped C and O ions incident on crystal targets 207 (2003) 283
Kumar, J., see Senthil Kumar, M. 207 (2003) 308
Kumar, R., see Dogra, A. 207 (2003) 296

Landron, C., see Hennet, L. 207 (2003) 447
LeGarrec, J.L., see Mitchell, J.B.A. 207 (2003) 227
Li, C.M., see An, Z. 207 (2003) 268
Liu, B.X., see Cheng, X.Q. 207 (2003) 301
Liu, M.T., see An, Z. 207 (2003) 268
Livingston, R.A., see Schweitzer, J.S. 207 (2003) 80
Loridon, J., see Raoux, A.-C. 207 (2003) 186
Luo, Z.M., see An, Z. 207 (2003) 268
Lyoussi, A., see Raoux, A.-C. 207 (2003) 186

Maheswaran, S., see Gao, F. . . . 207 (2003) 63
Makovicka, L., see Guillerminet, C. . . . 207 (2003) 124
Marmey, P., see Yang, Y. . . . 207 (2003) 165
Marques, C., see Alves, E. . . . 207 (2003) 55
Marstein, E.S., A.E. Gunns, U. Serincan, S. Jørgensen, A. Olsen, R. Turan and T.G. Finstad, Mechanisms of void formation in Ge implanted SiO_2 films . . . 207 (2003) 424
Martínez-Dávalos, A., see Menchaca-Rocha, A. . . . 207 (2003) 356
Matzen, G., see Hennet, L. . . . 207 (2003) 447
Mayer, M., B. Diaz-Herrera and M. Schneider, Backscattering of ^{6}Li and ^{7}Li Ions from oxygen below 6 MeV 207 (2003) 263
McCready, D.E., see Wang, C.M. . . . 207 (2003) 1
McCready, D.E., see Jiang, W. . . . 207 (2003) 453
McHargue, C., see Alves, E. . . . 207 (2003) 55
Meldrum, A., L.A. Boatner and R.C. Ewing, Size effects in the irradiation-induced crystalline-to-amorphous transformation . . . 207 (2003) 28
Meldrum, A., L.A. Boatner and K. Sorge, Microstructure and magnetic properties of Co nanoparticles in ion-implanted Al_2O_3 . . . 207 (2003) 36
Meldrum, A., see Thevuthasan, S. . . . 207 (2003) vii
Menchaca-Rocha, A., J.I. Cabrera, R. Alfaro, E. Belmont-Moreno and A. Martínez-Dávalos, A new approach to deal with non-linearities in Si detector response . . . 207 (2003) 356
Metelitsa, O.N., see Andrukhovich, S.K. . . . 207 (2003) 219
Metwalli, E. and C.G. Pantano, Reactive ion etching of glasses: Composition dependence . . . 207 (2003) 21
Misiuk, A., W. Wierzchowski, K. Wieteska, L. Bryja and W. Graeff, Erratum to "Synchrotron topography of high temperature–pressure treated silicon implanted with helium" [Nucl. Instr. and Meth. B 200 (2003) 358–362] . . . 207 (2003) 233
Misraki, J., see Raoux, A.-C. . . . 207 (2003) 186
Missana, T., see Alonso, U. . . . 207 (2003) 195
Mitchell, J.B.A., J.L. LeGarrec, D. Travers, B.R. Rowe, R.J. Randler, A. Plech and M. Wulff, A new apparatus for the measurement of X-ray absorption by flame generated particles . . . 207 (2003) 227
Mitsuo, A., see Akhajdenung, T. . . . 207 (2003) 45
Möllers, B., M. Walter, G. Zwicknagel, C. Carli and C. Toepffer, Drag force on ions in magnetized electron plasmas . . . 207 (2003) 462
Møller, S.P., see Uggerhøj, U.I. . . . 207 (2003) 402
Monteiro, T., see Alves, E. . . . 207 (2003) 55
Morenzoni, E., see Uggerhøj, U.I. . . . 207 (2003) 402

Naga Raju, G.J., see Bhuloka Reddy, S. . . . 207 (2003) 345
Nathuram, R., see Singh, H. . . . 207 (2003) 257
Novotny Jr., J., see Guillerminet, C. . . . 207 (2003) 124
Numazawa, S., see Kudo, H. . . . 207 (2003) 283

Olsen, A., see Marstein, E.S. . . . 207 (2003) 424
Ononye, L.C., see Alves, E. . . . 207 (2003) 55

Pantano, C.G., see Metwalli, E. . . . 207 (2003) 21
Passard, C., see Raoux, A.-C. . . . 207 (2003) 186
Patelli, A., see Alonso, U. . . . 207 (2003) 195
Peden, C.H.F., see Wang, C.M. . . . 207 (2003) 1
Pieck, S., see Dörschel, B. . . . 207 (2003) 154
Pio, C.A., see Almeida, S.M. . . . 207 (2003) 434
Plech, A., see Mitchell, J.B.A. . . . 207 (2003) 227
Popok, V.N., S.V. Prasalovich and E.E.B. Campbell, Nanohillock formation by impact of small low-energy clusters with surfaces . . . 207 (2003) 145
Porté, M.-C., see Yang, Y. . . . 207 (2003) 165
Prasalovich, S.V., see Popok, V.N. . . . 207 (2003) 145
Preusser, F., see Erfurt, G. . . . 207 (2003) 487

Price, D.L., see Hennet, L. 207 (2003) 447
Purkait, M., Classical/quantum correspondence in state selective charge transfer and ionization cross-sections for Li^{q+} (q = 1–3) ions with neutral hydrogen 207 (2003) 101

Randler, R.J., see Mitchell, J.B.A. 207 (2003) 227
Raoux, A.-C., A. Lyoussi, C. Passard, C. Denis, J. Loridon, J. Misraki and P. Chany, Transuranic waste assay by neutron interrogation and online prompt and delayed neutron measurement 207 (2003) 186
Ravagnan, J., see Alonso, U. 207 (2003) 195
Ravi Kumar, M., see Bhuloka Reddy, S. 207 (2003) 345
Reis, M.A., see Almeida, S.M. 207 (2003) 434
Rigato, V., see Alonso, U. 207 (2003) 195
Rolfs, C., see Schweitzer, J.S. 207 (2003) 80
Rowe, B.R., see Mitchell, J.B.A. 207 (2003) 227
Rundhe, M., see Kamila, J. 207 (2003) 291
Rusanov, V., Sv. Stankov, V. Angelov, N. Koop, H. Winkler and A.X. Trautwein, On the theory of the polarization effects and its experimental test by angle-dependent Mössbauer spectroscopy with guanidinium nitroprusside $(CN_3H_6)_2[Fe(CN)_5NO]$ (GNP) single crystals 207 (2003) 205

Saboungi, M.-L., see Hennet, L. 207 (2003) 447
Sahota, H.S., see Singh, H. 207 (2003) 257
Sakurai, C., see Kudo, H. 207 (2003) 283
Salvat, F., see Sempau, J. 207 (2003) 107
Satpati, B., see Kamila, J. 207 (2003) 291
Satyam, P.V., see Kamila, J. 207 (2003) 291
Sauvage, T., see Vincent, L. 207 (2003) 339
Scheidenberger, C., see Uggerhøj, U.I. 207 (2003) 402
Schneider, M., see Mayer, M. 207 (2003) 263
Schweitzer, J.S., R.A. Livingston, C. Rolfs, H.-W. Becker and S. Kubsky, Ion beam analysis of the hydration of tricalcium silicate 207 (2003) 80
Seetharami Reddy, B., see Bhuloka Reddy, S. 207 (2003) 345
Seki, S., see Kudo, H. 207 (2003) 283
Sempau, J., J.M. Fernández-Varea, E. Acosta and F. Salvat, Experimental benchmarks of the Monte Carlo code PENELOPE 207 (2003) 107
Senthil Kumar, M., G. Sonia, D. Kanjilal, R. Dhanasekaran and J. Kumar, Electrical and optical isolation of GaN by high energy ion irradiation 207 (2003) 308
Serincan, U., see Marstein, E.S. 207 (2003) 424
Shimozuma, M., see Date, H. 207 (2003) 373
Short, A., see Ambrosi, R.M. 207 (2003) 175
Shutthanandan, V., see Wang, C.M. 207 (2003) 1
Shutthanandan, V., see Jiang, W. 207 (2003) 92
Shutthanandan, V., see Jiang, W. 207 (2003) 453
Sigmund, P., see Glazov, L.G. 207 (2003) 240
Singh, H., K. Singh, L. Gerward, K. Singh, H.S. Sahota and R. Nathuram, $ZnO–PbO–B_2O_3$ glasses as gamma-ray shielding materials 207 (2003) 257
Singh, K., see Singh, H. 207 (2003) 257
Singh, K., see Singh, H. 207 (2003) 257
Singh, M., see Dogra, A. 207 (2003) 296
Smith, D.R., see Ambrosi, R.M. 207 (2003) 175
Soares, J., see Alves, E. 207 (2003) 55
Sonck, M., see Tárkányi, F. 207 (2003) 381
Sonia, G., see Senthil Kumar, M. 207 (2003) 308
Sorge, K., see Meldrum, A. 207 (2003) 36
Spevacek, V., see Guillerminet, C. 207 (2003) 124
Stankov, Sv., see Rusanov, V. 207 (2003) 205
Starke, S., see Dörschel, B. 207 (2003) 154
Suguri, T., see Kudo, H. 207 (2003) 283
Sundaram, S.K., see Thevuthasan, S. 207 (2003) 488

Sundareswar, B., see Bhuloka Reddy, S. 207 (2003) 345
Szelecsényi, F., see Tárkányi, F. 207 (2003) 381

Takács, S., see Tárkányi, F. 207 (2003) 381
Takeda, K.-i., see Kudo, H. 207 (2003) 283
Tang, C.H., see An, Z. 207 (2003) 268
Tang, X.J., see Cheng, X.Q. 207 (2003) 301
Tang, Y.J., see An, Z. 207 (2003) 268
Tárkányi, F., F. Ditrói, S. Takács, F. Szelecsényi, A. Hermanne and M. Sonck, Activation cross-sections of alpha induced nuclear reactions on iron up to 40 MeV 207 (2003) 381
Tessier, C., see Vincent, L. 207 (2003) 339
Thevuthasan, S., see Wang, C.M. 207 (2003) 1
Thevuthasan, S., see Gao, F. 207 (2003) 63
Thevuthasan, S., see Jiang, W. 207 (2003) 85
Thevuthasan, S., see Jiang, W. 207 (2003) 92
Thevuthasan, S., see Jiang, W. 207 (2003) 453
Thevuthasan, S., A. Meldrum, S.K. Sundaram and L.M. Wang, Editorial . . . . . 207 (2003) vii
Thiaudière, D., see Hennet, L. 207 (2003) 447
Thiele, H., see Dörschel, B. 207 (2003) 154
Thune, E., see Cabioc'h, T. 207 (2003) 409
Toepffer, C., see Müllers, B. 207 (2003) 462
Trautwein, A.X., see Rusanov, V. 207 (2003) 205
Travers, D., see Mitchell, J.B.A. 207 (2003) 227
Tsuruta, T., see Yoshioka, T. 207 (2003) 323
Turan, R., see Marstein, E.S. 207 (2003) 424
Turner, M.J.L., see Ambrosi, R.M. 207 (2003) 175

Uggerhøj, E., see Uggerhøj, U.I. 207 (2003) 402
Uggerhøj, U.I., H. Bluhme, H. Knudsen, S.P. Møller, E. Uggerhøj, E. Morenzoni and C. Scheidenberger, Channeling of antiprotons 207 (2003) 402

Vayer, M., see Vincent, L. 207 (2003) 339
Vijayan, V., see Bhuloka Reddy, S. 207 (2003) 345
Vincent, L., T. Sauvage, S. Houdayer, C. Tessier, S. Gautrot, O. Kaïtasov, J. Chaumont and M. Vayer, Secondary ion mass spectrometry depth profiling of ^{59}Co implanted into nickel 207 (2003) 339
Vukotich, P., see Andrukhovich, S.K. 207 (2003) 219

Walter, M., see Müllers, B. 207 (2003) 462
Wang, C.M., S. Thevuthasan, F. Gao, V. Shutthanandan, D.E. McCready, S.A. Chambers and C.H.F. Peden, Interface characteristics of iso-structural thin film and substrate pairs 207 (2003) 1
Wang, C.M., see Gao, F. 207 (2003) 63
Wang, D.Z., see Huang, N.K. 207 (2003) 395
Wang, L.M., see Thevuthasan, S. . . . . 207 (2003) vii
Wang, R.S., see Cheng, X.Q. 207 (2003) 301
Weaver, B.A. and A.J. Westphal, Nuclear track-formation models and the response of BP-1 detectors 207 (2003) 314
Weber, W.J., see Gao, F. 207 (2003) 10
Weber, W.J., see Jiang, W. 207 (2003) 85
Weber, W.J., see Jiang, W. 207 (2003) 92
Weber, W.J., see Jiang, W. 207 (2003) 453
Weickert, F., see Dörschel, B. 207 (2003) 154
Wells, A., see Ambrosi, R.M. 207 (2003) 175
Westphal, A.J., see Weaver, B.A. 207 (2003) 314
Wierzchowski, W., see Misiuk, A. 207 (2003) 233
Wieteska, K., see Misiuk, A. 207 (2003) 233
Winkler, H., see Rusanov, V. 207 (2003) 205
Wucher, A., see Heinrich, R. 207 (2003) 136
Wulff, M., see Mitchell, J.B.A. 207 (2003) 227

Xiong, Q., see Huang, N.K. 207 (2003) 395

Yang, B., see Huang, N.K. 207 (2003) 395
Yang, Y., M.-C. Porté, P. Marmey, A.J. El Haj, J. Amédée and C. Baquey, Covalent bonding of collagen on poly(L-lactic acid) by gamma irradiation 207 (2003) 165
Yoshioka, T., T. Tsuruta, H. Iwano, T. Danhara and Y. Koguchi, Fission-fragment registration and etching properties of diallyl phthalate with reference to its use as an external detector in fission-track dating 207 (2003) 323
Yoshitake, M., see Akhajdenung, T. 207 (2003) 45

Zhang, B.H., see An, Z. 207 (2003) 268
Zhang, Y., see Jiang, W. 207 (2003) 92
Zwicknagel, G., see Müllers, B. 207 (2003) 462

Available online at www.sciencedirect.com
SCIENCE DIRECT®
ELSEVIER
Nuclear Instruments and Methods in Physics Research B 207 (2003) 511–513
NIM B
Beam Interactions with Materials & Atoms
www.elsevier.com/locate/nimb

Subject index

Editorial

Editorial, S. Thevuthasan, A Meldrum, S.K. Sundaram and L.M. Wang . . . . . 207 (2003) vii

Basic Data for Materials Modifications and Analysis

Interface characteristics of iso-structural thin film and substrate pairs, C.M. Wang, S. Thevuthasan, F. Gao, V. Shutthanandan, D.E. McCready, S.A. Chambers and C.H.F. Peden 207 (2003) 1
Atomic-level simulations of misfit dislocation at the interface of Fe_2O_3/Al_2O_3 system, F. Gao, C.M. Wang, S. Maheswaran and S. Thevuthasan 207 (2003) 63
Classical/quantum correspondence in state selective charge transfer and ionization cross-sections for Li^{q+} (q = 1–3) ions with neutral hydrogen, M. Purkait 207 (2003) 101
Experimental benchmarks of the Monte Carlo code PENELOPE, J. Sempau, J.M. Fernández-Varea, E. Acosta and F. Salvat 207 (2003) 107
Determination of 3D dose distribution by PAG and Monte-Carlo simulations, C. Guillerminet, R. Gschwind, L. Makovicka, J. Novotny Jr., V. Spevacek and T. Cechak 207 (2003) 124
The neutron energy distribution to use in Monte Carlo modeling of neutron capture in thermal neutron beams, H. Degenaar and M. Blaauw 207 (2003) 131
Nuclear stopping in transmission experiments, L.G. Glazov and P. Sigmund 207 (2003) 240
ZnO–PbO–B_2O_3 glasses as gamma-ray shielding materials, H. Singh, K. Singh, L. Gerward, K. Singh, H.S. Sahota and R. Nathuram 207 (2003) 257
Backscattering of ^6Li and ^7Li Ions from oxygen below 6 MeV, M. Mayer, B. Diaz-Herrera and M. Schneider . 207 (2003) 263
Some recent progress on the measurement of K-shell ionization cross-sections of atoms by electron impact: Application to Ti and Cr elements, Z. An, M.T. Liu, Y.C. Fu, Z.M. Luo, C.H. Tang, C.M. Li, B.H. Zhang and Y.J. Tang 207 (2003) 268
Doppler broadened γ-lines from exotic nuclei, H.O.U. Fynbo 207 (2003) 275
Electron collision processes in gaseous xenon, H. Date, Y. Ishimaru and M. Shimozuma 207 (2003) 373
Activation cross-sections of alpha induced nuclear reactions on iron up to 40 MeV, F. Tárkányi, F. Ditrói, S. Takács, F. Szelecsényi, A. Hermanne and M. Sonck 207 (2003) 381

Atomic Collisions in Solids

Atomic simulation of ion–solid interaction in ceramics, F. Gao and W.J. Weber 207 (2003) 10
Projectile size effects on cluster formation in sputtering, R. Heinrich and A. Wucher 207 (2003) 136
Electron loss from fast partially stripped C and O ions incident on crystal targets, H. Kudo, K.-i. Takeda, T. Suguri, W. Iwazaki, C. Sakurai, I. Arano, S. Numazawa and S. Seki 207 (2003) 283
XPS study of hydrogen permeation effect on SiC–C films, N.K. Huang, D.Z. Wang, Q. Xiong and B. Yang . . 207 (2003) 395
Channeling of antiprotons, U.I. Uggerhøj, H. Bluhme, H. Knudsen, S.P. Møller, E. Uggerhøj, E. Morenzoni and C. Scheidenberger 207 (2003) 402

Ion and Laser Beam Modification of Materials

Reactive ion etching of glasses: Composition dependence, E. Metwalli and C.G. Pantano 207 (2003) 21
Microstructure and magnetic properties of Co nanoparticles in ion-implanted Al_2O_3, A. Meldrum, L.A. Boatner and K. Sorge 207 (2003) 36
Feasibility study of self-lubrication by chlorine implantation, T. Akhajdenung, T. Aizawa, M. Yoshitake and A. Mitsuo 207 (2003) 45

doi:10.1016/S0168-583X(03)01564-7

Structural and optical studies of Co and Ti implanted sapphire, E. Alves, C. Marques, R.C. da Silva, T. Monteiro, J. Soares, C. McHargue, L.C. Ononye and L.F. Allard 207 (2003) 55
Nanohillock formation by impact of small low-energy clusters with surfaces, V.N. Popok, S.V. Prasalovich and E.E.B. Campbell. 207 (2003) 145
Low current MeV Au^{2+} ion-induced amorphization in silicon: Rutherford backscattering spectrometry and transmission electron microscopy study, J. Kamila, B. Satpati, D.K. Goswami, M. Rundhe, B.N. Dev and P.V. Satyam. 207 (2003) 291
50 MeV Li^{3+} ion irradiation induced modifications in dielectric properties of Al^{3+} substituted Mg–Mn ferrite, A. Dogra, M. Singh and R. Kumar 207 (2003) 296
Formation of $MoSi_2$ and associated fractal growth on Si surface upon high current pulsed Mo-ion implantation, X.Q. Cheng, R.S. Wang, X.J. Tang and B.X. Liu 207 (2003) 301
Electrical and optical isolation of GaN by high energy ion irradiation, M. Senthil Kumar, G. Sonia, D. Kanjilal, R. Dhanasekaran and J. Kumar 207 (2003) 308
Resonant nuclear reaction analysis study of carbon phase formation during carbon ion-implantation into silver substrates, T. Cabioc'h, E. Thune, M. Jaouen and F. Bodart 207 (2003) 409
Dynamic Monte Carlo simulation for reactive sputtering of aluminium, Z.Y. Chen, A. Bogaerts, D. Depla and V. Ignatova 207 (2003) 415

Effects of Radiation

Size effects in the irradiation-induced crystalline-to-amorphous transformation, A. Meldrum, L.A. Boatner and R.C. Ewing 207 (2003) 28
Laser damage probability studies of fused silica modified by MeV ion implantation, T.E. Felter, L. Hrubesh, A. Kubota, L. Davila and M. Caturla 207 (2003) 72
Effect of ion irradiation in cadmium niobate pyrochlores, W. Jiang, W.J. Weber, S. Thevuthasan and L.A. Boatner 207 (2003) 85
Studies of SSNTDs made from LR-115 in view of their applicability in radiobiological experiments with alpha particles, B. Dörschel, D. Hermsdorf, S. Pieck, S. Starke, H. Thiele and F. Weickert 207 (2003) 154
Covalent bonding of collagen on poly(L-lactic acid) by gamma irradiation, Y. Yang, M.-C. Porté, P. Marmey, A.J. El Haj, J. Amédée and C. Baquey. 207 (2003) 165
The impact of low energy proton damage on the operational characteristics of EPIC-MOS CCDs, R.M. Ambrosi, D.R. Smith, A.F. Abbey, I.B. Hutchinson, E. Kendziorra, A. Short, A. Holland, M.J.L. Turner and A. Wells 207 (2003) 175
Nuclear track-formation models and the response of BP-1 detectors, B.A. Weaver and A.J. Westphal 207 (2003) 314
Fission-fragment registration and etching properties of diallyl phthalate with reference to its use as an external detector in fission-track dating, T. Yoshioka, T. Tsuruta, H. Iwano, T. Danhara and Y. Koguchi. 207 (2003) 323
Low energy heavy ion detection with the plastic scintillator NE102E, M.N. Akhtar, B. Ahmad and S. Ahmad 207 (2003) 333
Mechanisms of void formation in Ge implanted SiO_2 films, E.S. Marstein, A.E. Gunns, U. Serincan, S. Jørgensen, A. Olsen, R. Turan and T.G. Finstad. 207 (2003) 424

Analysis of Materials

Ion beam analysis of the hydration of tricalcium silicate, J.S. Schweitzer, R.A. Livingston, C. Rolfs, H.-W. Becker and S. Kubsky 207 (2003) 80
Ion beam analysis of irradiation effects in 6H–SiC, W. Jiang, W.J. Weber, Y. Zhang, S. Thevuthasan and V. Shutthanandan. 207 (2003) 92
Transuranic waste assay by neutron interrogation and online prompt and delayed neutron measurement, A.-C. Raoux, A. Lyoussi, C. Passard, C. Denis, J. Loridon, J. Misraki and P. Chany 207 (2003) 186
RBS and μPIXE analysis of uranium diffusion from bentonite to the rock matrix in a deep geological waste repository, U. Alonso, T. Missana, A. Patelli, J. Ravagnan and V. Rigato 207 (2003) 195
Secondary ion mass spectrometry depth profiling of ^{59}Co implanted into nickel, L. Vincent, T. Sauvage, S. Houdayer, C. Tessier, S. Gautrot, O. Kaïtasov, J. Chaumont and M. Vayer 207 (2003) 339
Trace elemental analysis of carcinoma kidney and stomach by PIXE method, S. Bhuloka Reddy, M. John Charles, G.J. Naga Raju, V. Vijayan, B. Seetharami Reddy, M. Ravi Kumar and B. Sundareswar 207 (2003) 345
Quality assurance in elemental analysis of airborne particles, S.M. Almeida, M.A. Reis, M.C. Freitas and C.A. Pio 207 (2003) 434

Anomalous x-ray scattering on molten levitated samples, L. Hennet, D. Thiaudière, C. Landron, J.-F. Berar, M.-L. Saboungi, G. Matzen and D.L. Price 207 (2003) 447
Oxygen analysis using energetic ion beams, W. Jiang, V. Shutthanandan, S. Thevuthasan, D.E. McCready and W.J. Weber 207 (2003) 453

Ion Sources and Beam Optics

Drag force on ions in magnetized electron plasmas, B. Müllers, M. Walter, G. Zwicknagel, C. Carli and C. Toepffer 207 (2003) 462

Experimental Methods and Equipment

On the theory of the polarization effects and its experimental test by angle-dependent Mössbauer spectroscopy with guanidinium nitroprusside $(CN_3H_6)_2[Fe(CN)_5NO]$ (GNP) single crystals, V. Rusanov, Sv. Stankov, V. Angelov, N. Koop, H. Winkler and A.X. Trautwein 207 (2003) 205
Investigation of orthopositronium 3γ-decay using a multidetector spectrometer, S.K. Andrukhovich, A.V. Berestov, N. Antovich, P. Vukotich, A.A. Gurinovich, A.A. Khrutchinsky and O.N. Metelitsa 207 (2003) 219
A new apparatus for the measurement of X-ray absorption by flame generated particles, J.B.A. Mitchell, J.L. LeGarrec, D. Travers, B.R. Rowe, R.J. Randler, A. Plech and M. Wulff. 207 (2003) 227
A new approach to deal with non-linearities in Si detector response, A. Menchaca-Rocha, J.I. Cabrera, R. Alfaro, E. Belmont-Moreno and A. Martínez-Dávalos 207 (2003) 356
Focusing limits of channeled high energy particles in bent crystals, G.V. Kovalev 207 (2003) 482
A fully automated multi-spectral radioluminescence reading system for geochronometry and dosimetry, G. Erfurt, M.R. Krbetschek, V.J. Bortolot and F. Preusser. 207 (2003) 487

Errata

Erratum to "Energy loss of ions in solids: Non-linear calculations for slow and swift ions" [Nucl. Instr. and Meth. B 195 (2002) 91–105], N.R. Arista 207 (2003) 232
Erratum to "Synchrotron topography of high temperature–pressure treated silicon implanted with helium" [Nucl. Instr. and Meth. B 200 (2003) 358–362], A. Misiuk, W. Wierzchowski, K. Wieteska, L. Bryja and W. Graeff 207 (2003) 233

(continued from page 4 of cover)

Experimental Methods and Equipment

Focusing limits of channeled high energy particles in bent crystals
G.V. Kovalev 482

A fully automated multi-spectral radioluminescence reading system for geochronometry and dosimetry
G. Erfurt, M.R. Krbetschek, V.J. Bortolot and F. Preusser 487

Calendar 500

Author Index 504

Subject Index 511

Electronic access to the full text of this journal is available for researchers at subscribing institutes from http://www.elsevier.com/locate/nimb

CONTENTS direct

This journal is part of **ContentsDirect**, the ***free*** alerting service which sends tables of contents by e-mail for Elsevier Science books and journals. You can register for **ContentsDirect** online at: **http://contentsdirect.elsevier.com**